

REMARKS

Claims 1-3, 5, 6, 8, 10-20, 22-32, 34-44, 46-56, 58-68, 70, 71, 73-80, 82-92, 94-104, 106-118, 120-126, 128-134, and 136-140 are now pending in the application. Applicant has cancelled Claims 119, 127 and 135 herein without prejudice in the interest of expediting prosecution. Applicant reserves the right to assert these cancelled claims in one or more continuing applications. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

Applicants would like to thank the Examiner for courtesy extended during the interview on May 25, 2005. During the interview, the Examiner agreed to allow claims rejected under 35 U.S.C. § 102(e) in view of Nguyen et al. (U.S. Patent No. 6,504,405) and Deas et al. (U.S. Patent Publication No. 2002/0070774) if the independent claims are amended to include the restriction that the hysteresis offset and/or delay are independent of the output signal. Applicants have attached a copy of the Examiner Interview Summary.

REJECTION UNDER 35 U.S.C. § 112

Claims 17, 62-63, 73-75, 83, 86-90, 98, 101-102, 110 and 113-114 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

Applicants have amended these claims in accordance with the Examiner's suggestions. These amendments are not narrowing amendments. Applicants believe that this rejection is now moot.

REJECTION UNDER 35 U.S.C. § 102

Claims 10-17, 18, 20, 22-30, 32, 34-42, 44, 46-53, 58-65, 70-71, 76-77, 73-75, 82-88, 89-91, 94-103, 106-115, 117, 119, 121, 123, 127, 129, 131, 133, 135, 137 and 139 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nguyen et al. (U.S. Pat. No. 6,504,405).

With respect to Claim 10, Nguyen et al. does not show, teach or suggest providing hysteresis offset and hysteresis delay that are independent of the digital output signal of the comparator circuit. Therefore, Claim 10 is allowable for at least this reason.

Claims 34, 46, 58, 70, 73, 117, 123, 125, 131, 133, and 139 are allowable for at least similar reasons as Claim 10. Claims 11-17, 35-41, 47-56, 59-68, 71, 74-80, 118, 124, 126, 132, 134, and 140 are directly or indirectly dependent from Claims 10, 34, 46, 58, 70, 73, 117, 123, 125, 131, 133, and 139, respectively, and are allowable for at least similar reasons.

Claims 117, 125, 131, 133 and 139 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Deas et al. (U.S. Pat. Publ. No. 2002/0070774). This rejection is respectfully traversed.

With respect to Claim 117, Deas et al. does not show, teach or suggest providing hysteresis offset and delay that are independent of an output signal. Therefore, Claim 117 is allowable for at least this reason.

Claims 125, 131, 133 and 139 are allowable for at least similar reasons as Claim 117. Claims 118, 126, 132, 134 and 140 are directly or indirectly dependent from Claims 117, 125, 131, 133 and 139, respectively, and are allowable for at least similar reasons.

Claims 83, 89-90, 95, 101-102, 107, 113-114, 121, 129 and 137 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nguyen et al. (U.S. Pat. No. 6,504,405).

With respect to Claim 83, Nguyen et al. does not show, teach or suggest a second programmable circuit in communication with the comparator circuit and operable to selectively provide a hysteresis delay in response to a second programmable control signal, wherein the comparator circuit receives the first signal and the second signal with applying the hysteresis delay, and wherein the hysteresis delay is independent of the digital output signal of the comparator circuit.

The hysteresis delay in Nguyen et al. and Deas et al. is dependent upon the output of the comparator circuit. Therefore Claim 83 is allowable for at least this reason.

Claims 95, 107, 121, 129, and 137 are allowable for at least similar reasons as Claim 83. Claims 89-90, 101-102, and 113-114 are directly or indirectly dependent from Claims 83, 95 and 107, respectively, and are allowable for at least similar reasons.

ALLOWABLE SUBJECT MATTER

Claims 1-3, 5-6 and 8 are allowed.

The Examiner states that Claims 19, 31, 43, 54-56, 66-68, 78-80, 92, 104, 116, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138 and 140 would be allowable if rewritten in independent form. Accordingly, Applicant has amended Claims 19, 31, 43, 54, 56, 66, 68, 78, 80, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138 and 140 to include the limitations of the base claim and any intervening claims. Therefore, Claims 19, 31, 43, 54-56, 66-68, 78-80, 118, 120, 122, 124, 126, 128, 130, 132, 134, 136, 138 and 140 should now be in condition for allowance. Applicant will presently refrain from rewriting Claims 92, 104 and 116 into independent form. However, Applicant reserves the right to amend Claims 92, 104 and 116 into their originally allowable form at a later date if needed.

The Examiner states that Claims 86-88, 98 and 110 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112. Applicant has amended these claims to overcome the rejections under 35 U.S.C. § 112.

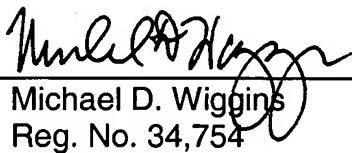
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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